ON THE MOVE

Ontario agriculture & rural division's envisioned future...explorers of the future, designers of solutions harnessing the power of information

The mandate of Ontario's Ministry of Agriculture, Food and Rural Affairs (OMAFRA)'s Agriculture and Rural Division includes crop and livestock production and technology transfer, managing the environmental, and rural economic development.

This report provides a sampling of the Division's key initiatives that achieve OMAFRA's core business goals.

Bringing the resources of the world to rural Ontario

No matter what the enterprise, Information — compiling it, sorting it, analyzing it, and knowing if and how it applies to a particular situation — is this century's global currency.

It's through knowledge that people can spot trends, innovate, minimize risk, form strategic alliances, access new technology, identify niche markets...the list is endless. The demand for credible, sophisticated, globally relevant and regionally specific information is growing - as are the sources from which it's gleaned.

The role of the Agriculture and Rural Division of the Ontario Ministry of Agriculture and Food is to strengthen the agricultural sector and rural communities for the benefit of Ontario.

And as the needs of its diverse clientele are many and varied, so are the means by which the recently realigned division can meet or exceed them.

This report highlights some recent outstanding efforts by Ontario's agri-food sector and rural communities, and the various roles that Agriculture and Rural Division staff have played in them.

> ***Accessing the right information at the right time allows people to make the most of change — to anticipate and adapt, not just react and resist.***

Change is the only safe bet

Producing top quality food for consumers worldwide is now just one of many tasks on the daily to-do list of Ontario's farmers.

The pace of change has had a profound effect on Ontario agriculture in recent years. Farm consolidations, on-farm food safety, fierce competition on all sides, razor-thin margins, fluctuating consumer preferences, soil and water quality concerns, and an avalanche of new market information and technology are among the challenges facing today's farmers.

The only constant is more change, at an even faster pace.

Ontario's farmers are proving they're up to the task — harnessing the forces of change to further distinguish their products in the provincial, national and global marketplace.

> *Today's farmers are exposed to more information in six months than previous generations saw in their lifetimes.*
>
> *Ontario leads all other provinces in agri-food exports. In 1999, Ontario exported more than $6.6 billion. Exports have increased by 212% over the past decade.*
>
> *A recent study (2000) reported that farms in Ontario produce annual sales of over $7 billion. Businesses tied to agriculture have another $15-20 billion in additional agriculture-related sales annually.*
> *(Source: Harry Cummings andAssociates)*

Rural communities find strength in diversity

Realignment in the farm sector affects rural communities around the province.

A diminishing farm population, an influx of non-farm residents, water quality issues, new responsibilities, urban sprawl, competing demands for land use, a shrinking tax base, and changing expectations of services are among the forces with which rural communities are contending.

Like the agri-food sector, the province's rural municipalities are using the forces of change to create opportunities for their citizens. New knowledge-based businesses and other services are supplementing single-industry economies. Small business start-ups are being recognized as a major source of job creation, and communities are inviting them in.

Rural Ontario is finding strength in its new-found diversity, and in thinking big — the world is its marketplace.

Many rural municipalities are striking partnerships with other local public and private sectors to accomplish community goals. They know that their community's health is not measured by economic activity alone: investment in human and natural resources can also determine quality of life for all residents.

> ***Rural communities whose residents are empowered with the knowledge and skills to manage their livelihoods will be able to capitalize on opportunities provided by a knowledge- and information-based society.***
> ***(Source: OMAFRA)***

MOVING FORWARD

Environmental Responsibility Based on Teamwork

- **ENVIRONMENTAL FARM PLANS**

The Ontario Environmental Farm Plan (EFP) is both a risk assessment tool and an educational process that encourages farmers to incorporate best practices in all their farming activities. Since its inception in 1993, EFP has enjoyed strong popularity among Ontario's farmers, with more than 18,500 participants.

EFP has been successful at changing farmers' attitudes and behaviours toward the environment. Through peer-run workshops, the process allows participants to learn about best management practices (see below) and to apply technically sound solutions to identified potential risks in an environmental action plan. The program has encouraged on-farm investments in environmental improvements of more than $43.8 million through the related EFP Incentive Program.

The flagship program of the Ontario Farm Environmental Coalition (OFEC) , EFP is a partnership between industry and government Federally funded by Agriculture and Agri-Food Canada's CanAdapt program, EFP is delivered by the Ontario Soil and Crop Improvement Association with technical expertise provided by OMAFRA's specialist staff.

OMAFRA has played an integral role in EFP's success. The comprehensive self-assessment workbook each farmer uses to create a customized EFP was written largely by OMAFRA staff, in consultation with farm, government and non-government organizations. OMAFRA staff have also played a role in the delivery of technical information at EFP workshops.

For more information on Environmental Farm Plan Infosheets, visit http:/www.gov.on.ca/OMAFRA/english/environment/EFP/efp-coverpage.htm

- **BEST MANAGEMENT PRACTICES**

A "best management practice" (or BMP) is a proven and practical farm management technique that balances production goals with environmental responsibility. This simple concept underlies an international award-winning series of 16 innovative books, two videos, two slide shows, and a CD-ROM. More are planned.

BMP products are the fruit of a 10-year-old partnership of the Ontario Federation of Agriculture, Agriculture and Agri-Food Canada, and OMAFRA. From the beginning, BMP books, which address management issues concerning soils, crops, water, nutrients, livestock waste, pesticides and much more, have enjoyed the respect and attention of farmers, the agri-food industry, and rural municipalities and planners. It's no accident. All BMP books are developed by OMAFRA's resource managers bring together leading producers, commodity groups, researchers, regulatory agencies, and OMAFRA's technical specialists to advise on content.

As a spin-off benefit, the books and the widespread adoption of the BMPs they advocate have also proven to be useful and timely evidence of agriculture's active care of on-farm soil and water resources.

To order BMP books, visit
http://www.gov.on.ca/OMAFRA/english/products/best.html

- **INTENSIVE AGRICULTURAL OPERATIONS**

An increasing number of people have been moving from cities into rural areas. As a result of these changing demographics, there has been opportunity for conflict between some farms — large livestock operations in particular — and their rural neighbours.

Some municipalities have been trying to resolve these issues by passing local by-laws related to certain farm practices that the farm community often found restrictive.

In January and February 2000, a task force gathered information and conducted public consultations on intensive agriculture. The April 2000 Task Force Report recommended a three-pronged approach: province-wide standards for farm practices related to nutrient management, an education and awareness program, and certification and/or licensing for those in the business of applying nutrients.

Based on these recommendations, a proposal for legislation was released in July 2000. The proposal focused on: 1) categories for types of farms including livestock operations; 2) the development of standards for agricultural practices including manure handling, storage and application; and 3) strict enforcement authority with penalties and fines for infractions. Additional public consultation over the summer and fall served to clarify issues around enforcement and the scope of the proposed legislation.

Stakeholders have expressed strong support for standards regulating on-farm nutrient management practices. Nutrient management planning is a process that identifies how manure, fertilizers, other nutrients and existing soil fertility are effectively used by crops in an environmentally responsible manner on the farm. OMAFRA staff have developed an array of informative print materials and training courses to help farmers handle, store and apply on-farm nutrients. These include nutrient management planning software, Best Management Practices books, and municipal training manuals. In addition, staff have participated in several technical demonstrations for improving the management of agriculture nutrients.

On June 13, 2001, The Honourable Brian Coburn, Minister of Agriculture, Food and Rural Affairs, introduced Bill 81- The Proposed Nutrient Management Act. Bill 81 is "enabling" legislation that would allow the Provincial Government to set the standards for managing material containing nutrients that are land applied.

For more information, visit
http://www.gov.on.ca/OMAFRA/english/agops/index.html

- **INTEGRATED PEST MANAGEMENT**

In the past 15 years, Ontario farmers have greatly reduced their reliance on pesticides as one tool for managing weeds, insects, and diseases. In their place, integrated pest management (IPM) offers a wide range of management options to keep pests at tolerable levels while preserving the high quality produce that consumers demand.

IPM requires close monitoring of pests and timely and appropriate intervention. It's a knowledge-based system that has grown on the strength of cooperation among growers, researchers, consultants, and OMAFRA's provincial IPM specialists.

IPM publications such as *IPM for Apple Orchards* by OMAFRA are resource tools providing the latest information and methodology to conduct an effective IPM program in orchards. Forty-five percent of all apple acreage is on an IPM program today.

Ontario will be hosting an international IPM called 'Exploring New Frontiers in Integrated Pest Management" on March 24 to 26, 2002 at the International Plaza Hotel in Toronto. This conference is an initiative of the following partners: AgCare, Agriculture and Agri-food Canada, the University of Guelph, Pest Management Regulatory Agency, OMAFRA and the Ministry of Environment. The aim of the conference is to bring together world-wide researchers, extension specialists, consultants, agribusiness representatives and growers to share current knowledge and practices, and explore future directions of IPM.

OMAFRA's IPM technical specialists have developed an innovative conference program featuring international experts who will speak on the following topics:

- Sharing new technologies in IPM
- Using IPM measuring systems
- Removing the barriers and making IPM work
- Promoting IPM
- Developing a vision of IPM for 2015

For more information, visit http://www.gov.on.ca/OMAFRA/ipmconference/

- **REGISTRATION OF MINOR USE PEST-CONTROL PRODUCTS**

Pest control products remain an important part of a grower's crop management program. New pest control products are more effective and efficient than their predecessors, with fewer side effects in the environment.

All pest control products in Canada are subject to rigorous and long-term testing before approval. But approval does not automatically extend to "minor use" applications, i.e., high value crops grown on small acreages. It takes a concerted effort to get new products registered for minor use in a timely manner.

A recent success story involves the registration of Pyridaben, a miticide that helps control spider mites in greenhouse cucumbers. Persistence by researchers and OMAFRA crop specialists paid off for growers, who now have a safe, IPM-friendly product.

- **LIVESTOCK MORTALITY MANAGEMENT**

The responsible disposal of livestock mortality is a challenge facing all livestock and poultry producers. Proper disposal reduces the risk of spreading disease and impacting water quality.

OMAFRA has launched an education program to ensure all stakeholders are well-informed of their responsibilities regarding animal disposal. Trained inspectors respond to complaints and ensure producers follow the regulatory requirements of the Dead Animal Disposal Act. Ministry staff are also working with livestock morality collection and rendering businesses to help maintain the much-needed services they provide.

For more information on deadstock disposal, visit
http://www.gov.on.ca/OMAFRA/english/livestock/deadstock/index.html

- **"BRING IT BACK' PILOT PROJECT**

Producers require safe, suitable disposal sites for expired or unwanted livestock medicines, vaccines and scalpels. Improper disposal adds risks to human health and safety and to the environment. To create opportunities for proper disposal, livestock medicine vendors and OMAFRA partnered to introduce the 'Bring It Back' pilot project. The project, which generated significant response by producers, provided five locations in eastern Ontario where producers could safely dispose of expired or unwanted medicines, vaccines and "sharps".

For more information on the registration, sale and use of livestock medicines, visit http://www.gov.on.ca/OMAFRA/english/livestock/animalcare/livestockmed.htm

MOVING UP

Applied Science Maps Rural Ontario

- **GEOGRAPHIC INFORMATION SYSTEMS**

Rural Ontario will soon be the beneficiary of Geographic Information Systems (GIS). The data collection technology is helping OMAFRA staff map soils and drainage information, support land use planning decisions, identify opportunities for rural economic development, and even monitor animal health. Information is updated easily, and can complement other geographic data.

In the near future, this GIS data will be available to municipalities, researchers, farmers and agribusinesses. Complex decision-making will be easier because information can be viewed and interpreted in new ways. In the not-so-distant future, unlimited amounts of geographic data could be retrievable from the Internet, through OMAFRA and other sources. As wireless technology evolves, GIS will be viewed in the very field from which the data was taken, allowing for instant field checks and updates.

For more information on the Guelph Geomatics Service Centre, visit http://www.gov.on.ca/OMAFRA/english/landuse/gis/geomatic.htm

- **PRECISION FARMING**

Precision farming is another decision-making tool that's coming on strong. Partly based on GIS, global positioning systems (GPS) and other high tech tools, the outcome is a more precise application of resources such as nutrients and pesticides. The ultimate goal is to get the right formulation to the right target, at the right time, in a cost-effective manner — in other words, maintain or reduce yields, lower input costs, and reduce environmental impact.

While precision farming is still a developing technology in Ontario, local interest is mounting. The adoption of Variable Rate Technology — application equipment that allows the rate of inputs to be controlled and varied while in the field — is expected to increase rapidly in the short term.

Working with industry representatives and researchers at Guelph, OMAFRA staff continue to be actively involved in exploring this burgeoning technology through the long-term Ontario Site Specific Cropping Management Project.

For more information on precision farming, visit
http://www.gov.on.ca/OMAFRA/english/environment/precision/precision.htm

- **DAIRY CATTLE COMFORT & PRODUCTIVITY**

The design of stalls in dairy barns is changing, thanks to ongoing research in cow comfort and productivity. OMAFRA veterinary science staff studied and videotaped cows resting in stalls of various designs. Results show that cows have four natural resting positions. By changing stall features, cows express more natural movement and resting behaviour. This reduces injuries and lameness, and improves cows' performance.

In other dairy-related research, innovations in robotic milking technology offer rewards to both dairy cows and farmers. The technology lets cows determine their own milking times and increases production by 10–15% — without the need to hire extra labour.

At the 2000 Canada's Outdoor Farm Show, more than 18,000 visitors viewed the robotic milking exhibit staffed by OMAFRA specialists and industry partners. Ministry specialists are co-ordinating the first North American conference on robotic milking, to be held in Ontario March 2002.

For more information on Dairy Herd-Housing and Environment visit
http://www.gov.on.ca/OMAFRA/english/livestock/dairy/herd/house/index.html

For more information on Dairy Herd-Milking Procedures Systems
http://www.gov.on.ca/OMAFRA/english/livestock/dairy/herd/proc/index.html

MOVING OUT

Domestic and Export Markets Set Standards for Food Safety and Quality

- **'MAINSTREAM' MARKETING**

Consumers have high expectations for the beef they buy: safe consistent quality, tender, juicy and flavourful. With the help of OMAFRA's " Mainstream Market" initiative, Ontario's beef producers are meeting or exceeding these expectations.

Mainstream Market is an educational effort by OMAFRA's specialists that integrates genetics, management and feeding practices to produce consistently high quality beef. An emphasis on management practices and feeding has contributed to 70% of Ontario beef cattle being grade AA or AAA, providing consumers with a tender, juicy, flavourful product. In the future, it's expected that the benefits of suggested approaches to breeding, management and feeding will raise the percentage of Ontario beef cattle meeting the desired standard.

For more information of Beef- Genetics visit
http://www.gov.on.ca/OMAFRA/english/livestock/beef/genetics.html

For more information of Beef -Handling visit
http://www.gov.on.ca/OMAFRA/english/livestock/beef/handling.htm

For more information of Beef-Nutrition visit
http://www.gov.on.ca/OMAFRA/english/livestock/beef/nutritio.html

- **ON-FARM FOOD SAFETY**

Ontario's farm exports continue to meet or exceed progressive quality and safety standards — not surprising, since the province is a leader in developing food safety guidelines and producer education programs. As importers initiate quality assurance requirements for agricultural products, Ontario producers are well-positioned to satisfy them.

Evidence of OMAFRA's commitment to on-farm food safety initiatives can be found in its partnership with Ontario Pork to deliver "Canadian Quality Assurance" (CQA™). CQA is based on the principles of Hazard Analysis and

Critical Control Points — an internationally recognized approach to reducing food safety risks.

CQA identifies potential food hazards on the farm and the practices that will minimize or eliminate them, and offers help to develop a management plan to control them in the long term.

An initiative of the pork industry, the voluntary certification program requires producers to maintain specific records and have them and farm operations reviewed annually by CQA validators. It's this rigorous process that assures international buyers of the high quality of Canadian pork.

In other commodities such as beef, dairy, and sheep, OMAFRA staff are actively contributing to the development of national on-farm food safety quality assurance programs.

For more information of Dairy- Milk Quality and Safety visit
http://www.gov.on.ca/OMAFRA/english/livestock/dairy/quality/index.html

For more information of Beef- Quality Assurance visit
http://www.gov.on.ca/OMAFRA/english/livestock/beef/quality.htm

On June 25, The Honourable Brian Coburn, Minister of Agriculture, Food and Rural Affairs, introduced Bill 87- Food Safety and Quality Act. This proposed legislation develops new food safety laws that will protect the public through consistent, high standards for food grown and processed in the province.

An electronic version of the proposed Food Safety and Quality Act may be viewed on the OMAFRA web site at:
http://www.gov.on.ca/OMAFRA/english/infores/foodsafe/FSAct_2001/Index.html

MOVING ONWARD

The Road to a Stronger Economy Takes a Rural Route

- **INVESTMENTS IN THE FUTURE**

Healthy Futures for Ontario Agriculture Fund (HFOA) invests in the safety and quality of Ontario food products, capitalizing on marketing and export opportunities, and improving rural water quality.

The $35-million **Rural Youth Job Strategy** is paving the way for businesses, entrepreneurs and communities to eliminate barriers to employment for rural youth, and build a workforce that's prepared for the future. As of December 2000, a combined private and public investment of over $40.2 million has been made in 66 projects benefiting rural youth. These projects will contribute to the development of approximately 7,650 rural youth — providing a foundation for stronger rural communities for generations to come.

The **Rural Job Strategy Fund**, a five-year $30-million investment program, approved 192 project approved with $163 million committed by the public and private sector through the fund. It's expected that over 10,000 jobs will be created. The program is in its final phase issuing payments until March 2002.

BR+E, short for **Business Retention and Expansion**, is a long-respected process used by those wishing to expand businesses and improve local economies — both of which have been goals of governments, communities, economic development organizations and businesses for a number of years.

B R + E

BUSINESS RETENTION AND EXPANSION

BR+E's strength and uniqueness as an economic development tool is that it is community-based and volunteer-driven. Community representatives involved in implementing the 10 pilot BR+E projects have given strong support for the BR+E program. Results include the retention of approximately 300 jobs in two community projects, the expansion of businesses, improvements to local approval processes, the resolution of business issues, the creation of an improved pro-business attitude, and the development of strategic economic development plans.

The BR+E Ontario partnership, which consists of private-sector businesses, economic development organizations and provincial and federal governments, is launching the first customized database for use by communities. It will help communities compile and analyze local business needs and concerns. The database housed on a CD-ROM is part of the first Ontario BR+E Tool Kit for Communities. The kits, which are available for purchase by all Ontario communities, contain details on the steps to take to have successful BR+E projects, tips on working with people, approaches to tracking progress and assessing results, and a promotional and training video. This information will help all Ontario communities promote job growth and economic prosperity.

Agriculture shakes the GTA

Local chapters of the Ontario Federation of Agriculture and other farm organizations throughout Ontario recently studied the impact of agriculture on local economies. The results of a study of agriculture in the GTA were particularly interesting — revealing the sector's significant contribution to the economy of Ontario's most urbanized region. Many OMAFRA staff across the province provided leadership to local farm groups in conducting the studies.

For more information on Health Futures for Ontario Agriculture visit
http://www.gov.on.ca/OMAFRA/english/hfoa/index.html

For more information on Rural Youth Job Strategy visit
http://www.gov.on.ca/OMAFRA/english/infores/ryjs/index.html

For more information on Rural Job Strategy Fund visit
http://www.gov.on.ca/OMAFRA/english/rural/jobstrat/rjs.html

For more information on Business Retention and Expansion visit
http://www.gov.on.ca/OMAFRA/english/rural/BrandE/BrandE.htm

MOVING TOGETHER

Partnerships Accelerate the Pace of Progress

- **CONNECTING RURAL ONTARIO**

Rural communities need and deserve fast, reliable access to telecommunications like phones, cellular phones, and the Internet. Telecommunications can be a catalyst for economic and social development within and among communities. In partnership with a number of public and private groups, OMAFRA staff continue to work to improve accessibility.

Industry Canada's Community Access Program (CAP) helps communities create public places for people to use the Internet and learn how to use it effectively. Rural southern Ontario has been the focus of OMAFRA's six regional specialists, who've helped communities lay the groundwork for sustainable sites. Since 1998, ministry staff have helped to establish more than 400 new CAP sites, and has worked with over 500 existing sites to promote their long-term viability.

OMAFRA staff continue to work on other fronts with government ministries, private companies, non-profit organizations and communities to enhance the availability of high-speed telecommunications in rural Ontario.

- **SUCCESSION PLANNING**

Farm succession is the life-long process of preparing and transferring both the ownership and the management of farm businesses to the next generation of farmers. It is one of the bigger issues that farm families will face over the next 10–15 years. The estimated 120,000 Canadian farmers preparing for retirement during that period control some $50 billion in farm assets. In Ontario, on average, approximately $100,000 of farm assets are expected change hands per hour, every hour of every day, until 2015.

That's why OMAFRA joined a broad coalition of government and industry partners to develop the Ontario Centre for Family Farm Succession. The Centre provides opportunities for accountants, lawyers, financial planners, lenders and business advisors to obtain the skills and tools they need to help farm families do the job right. A key message of these professionals is that succession planning is a lifelong part of the business process — not a once in a lifetime event.

- **SOUTHWEST AGRICULTURAL CONFERENCE**

This annual conference held at Ridgetown College focuses on field crops, with growing attention to business and marketing topics. It's clearly a winner — attendance ranges from 1500 to 1700 over two days, and agribusiness is a strong financial supporter.

Organizers take pride in offering hard-hitting, up-to-the-minute information on current issues. OMAFA crop technology staff develop the program, help with promotion and sponsorship, and supervise the conference. Their partners include the Southwest Soil and Crop Improvement Association, Ridgetown College and the University of Guelph.

- **PROVINCIAL/LOCAL SOIL AND CROP IMPROVEMENT ASSOCIATION**

Keeping an open line of communication is essential for healthy partnerships to ensure that new technologies are transferred effectively to producers. Provincial/local Ontario Soil and Crop Association (OSCIA) and the ministry have partnered in the development of solutions, research, technology and information. This has been achieved by OMAFRA working with the OSCIA to develop regional associations and hire regional co-ordinators to improve communications between our organization and their organization. Regional on-farm evaluations/demonstrations such as nitrogen projects and a provincial web site using on-line variety trials have been established. Ministry staff continue to be an information source through providing Crop Talk, a technical newsletter, and speakers for workshops.

- **RESOURCES FOR NEW VENTURES**

One-stop service is now available for budding entrepreneurs throughout the province. Ontarians with ideas for starting a small business can find much of what they need in one of 33 offices. Business Self-Help Offices and Small Business Enterprise Centres offer support to start-up and small- to medium-sized entrepreneurs during the first critical years.

Clients are provided with ready access to pertinent documents, seminars and literature, information on assistance programs and sound advice.

Business Self-Help Offices are co-ordinated by the Ministry of Economic Development and Trade and OMAFRA, in partnership with local municipalities and Chambers of Commerce. In northern Ontario, the offices are co-ordinated by the Ministry of Northern Development and Mines.

HOW TO REACH US...AND HOW WE REACH YOU

Agricultural Information Contact Centre — 1-877-424-1300

- An immediate source of technical information for farm, agri-business and rural business inquiries
- Staffed by knowledgeable agricultural professionals with ready access to technical, business, and management resources

Government Information Centres —
Check the blue pages of your local phone book

- Located in 57 communities throughout the province
- Offer one-window access to government information, including OMAFRA's printed resources

Internet — www.gov.on.ca/omafra

- The Ontario Ministry of Agriculture, Food and Rural Affairs website, www.gov.on.ca/omafra, offers a continually expanding array of the latest technical information and other developments, with many links to more resources

Northern Ontario — 1-800-461-6132

- Located at the Verner, has information that addresses conditions in Ontario
- Office sites in Echo Bay, Gore Bay, New Liskeard, Thunder Bay and Emo house agriculture and rural representatives who serve the north

OMAFRA Resource Centres — 1-877-424-1300

Call 1-877-424-1300 for the location & phone number closest to you

- Located in 13 communities across southern Ontario
- Feature Regional Information Co-ordinators to market OMAFRA and identify resources, issues, trends and technologies — also located in other offices throughout the province
- House crop, livestock, and resource management specialists, who collect, interpret and deliver research results adapted to Ontario conditions
- Disseminate information at seminars, workshops and commodity association meetings

Self-Help Offices and Small Business Enterprise Centres —

Check the blue pages of your local phone book, under 'Business'

- Provide services for rural entrepreneurs
- Staff and resources are available to help rural businesses and assist communities in retaining and attracting businesses